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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,319	06/06/2001	Takuya Adachi	96790p363	8424
8791	7590	07/01/2004	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR LOS ANGELES, CA 90025			TUCKER, WESLEY J	
			ART UNIT	PAPER NUMBER
			2623	9

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,319

Applicant(s)

ADACHI ET AL.

Examiner

Wes Tucker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 6-30,36-45 and 51-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 30-35, and 46-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of species 1 corresponding to claims 1-5 in the reply filed on May 3, 2004 is acknowledged.

However the selected species is deemed to correspond to claims 31-35 and 46-50 as well claims 1-5. All of these claims have been examined.

2. Claims 6-30, 36-45, and 51-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species 2, 3, 4, 5, 6, and 7, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 3, 2004.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 3-5, 31, 33-35, 46, and 48-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

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enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5. With regard to claim 1, lines 2 and 3 refer to "first collation means for obtaining a coincidence ratio between first and second images for each collation unit." It is unclear why each collation unit is used when only a first collation means is named. Further claim 1, lines 6-8 reads "means for obtaining a minimum coincidence ratio from coincidence ratios obtained from first collation means." It is unclear how multiple ratios are obtained from first collation means.

In claim 1, lines 10-12, it is unclear how a minimum coincidence ratio being less than a threshold can signify the images being identical unless the coincidence ratio is a measure of difference meaning the bigger the ratio the bigger the difference. However in the specification on page 12, lines 1-3 explains that coincidence ratios are degrees of similarity. Clarification is required.

6. With regard to claim 3, the minimum and maximum coincidence ratios are again unclear. On page 15, lines 20-27 and page 16, lines 1-5, formulas are given for coincidence ratios. However it is unclear how dividing the coincident pixels by the total number of black pixels gives a measure of similarity and how finding the maximum ratio and the minimum ratio and taking the difference of the two determines the similarity of two images. Clarification is required.

7. With regard to claim 4, the discussion of claim 3 applies. It is unclear how taking a quotient of the max and min coincidence ratios gives a measure of similarity.

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8. With regard to claim 5, again it is unclear what the coincidence ratios actually represent and how having a minimum less than a threshold and a maximum greater than another threshold will give a measure a similarity in the context of this application.

With regard to claims 31 and 46, the discussion of claim 1 applies.

With regard to claims 33 and 48, the discussion of claim 3 applies.

With regard to claims 34 and 49, the discussion of claim 4 applies.

With regard to claims 35 and 50, the discussion of claim 5 applies.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claim 1-3, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,094,499 to Nakajima et al.

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11. With regard to claim 1, Nakajima discloses an image collation apparatus comprising:

first collation means for obtaining a coincidence ratio between first and second images within a printing element range for each collation unit by collating the first and second images with each other (column 20, lines 25-26);

minimum coincidence ratio extraction means for obtaining a minimum coincidence ratio from coincidence ratios obtained from said first collation means (column 20, lines 26-28); and

determination means for determining that the first and second images are identical, if the extracted minimum coincidence ratio is smaller than a predetermined threshold (column 20, lines 24-34).

The minimum coincidence ratio is interpreted as the difference between the two images and therefore if the difference between the two images is smaller than a threshold, then the images will be determined to be identical. This is effectively what Nakajima discloses in reversed logic where the correlation value is the measure of matching of the two images, or the minimum coincidence ratio, and if this value is above a threshold then a match exists between the images.

12. With regard to claim 2, Nakajima discloses an apparatus according to claim 1, wherein said apparatus further comprises:

first image transformation means for repeatedly executing at least one of transformation processing and rotation processing for the first image within a predetermined range for each collation unit and outputting the first image after the image processing (column 16, lines 8-22 and Fig.13, element 705), and

said first collation means obtains the coincidence ratio by collating the first image output from said first image transformation means with the second image every time said first image transformation means performs image processing (column 16, lines 8-22 and Fig. 13, element 711-713).

13. With regard to claim 31, the discussion of claim 1 applies. Nakajima discloses an image collation method in use with the apparatus discussed in claim 1 (column 20, lines 24-34 and Fig. 13).

14. With regard to claim 32, the discussion of claim 2 applies.

15. With regard to claim 46, the discussion of claim 1 applies. Nakajima discloses an image collation program causing a computer to execute collation operations (Fig. 2, element 20-1).

16. With regard to claim 47, the discussion of claim 2 applies.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wes Tucker whose telephone number is 703-305-6700. The examiner can normally be reached on 9AM-5PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703)308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wes Tucker

6-25-2004


Jon Chang
Primary Examiner